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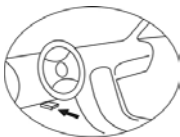
## 1. Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the Scan Tool, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:

1. Always perform automotive testing in a safe environment.
2. Wear safety eye protection that meets ANSI standards.
3. Keep clothing, hair, hands, tools, test equipment, etc, away from all moving or hot engine parts.
4. Operate the vehicle in a well-ventilated work area; Exhaust gases are poisonous.
5. Put blocks on drive wheels and never leave vehicle unattended while running tests.
6. Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
7. Put transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking break is engaged.
8. Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.
9. Don't connect or disconnect any test equipment with ignition on or engine running.
10. Keep the Scan Tool dry, clean and free from oil, water and grease. Use a mild detergent on a clean cloth to clean the outside of the Scan Tool, when necessary.

## 2. Location of the Data Link Connector (DLC)

The DLC (Data Link Connector or Diagnostic Link Connector) is the standardized 16-cavity connector where diagnostic scan tools interface with the vehicle's on-board computer. The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side for most vehicles. For some Asian and European vehicles, the DLC is located behind the ashtray and the ashtray must be removed to access the connector. Refer to the vehicle's service manual for the location if the DLC can not be found.



## 3. Using the EPB Service Tool

### 3.1 Tool Description



**1.LCD DISPLAY**--Indicates test results. It is a backlit 2-line display with 8 characters on each line.

**2. ENTER BUTTON**--Confirms a selection (or action) from a menu list, or returns to the main menu.

**3. EXIT BUTTON**--Scrolls through menu items or cancel an operation

**4.&5. UP& DOWN BUTTON**--Chooses to up and down items

**6.OBD II CONNECTOR**--Connects the Code Scanner to the vehicle's Data Link Connector (DLC).

## 3.2 Product Specifications

1. Display: LCD, 2 lines, 8 characters, backlit
2. Operating Temperature: 0 to 50°C (-32 to 122 F°)
3. Storage Temperature: -20 to 70°C (-4 to 158 F°)
4. Power provided via detachable heavy duty OBD II cable
5. Dimensions:

Length	Width	Height
110 mm ( 4.3" )	70 mm ( 2.75" )	16mm (0.63" )
6. Weight: 150g (0.33p)

## 3.3 Accessories Included

- 1) User's Manual -- Instructions on tool operations
- 2) OBD2 cable -- Provides power to tool and communicates between tool and vehicle.

## 3.4 Navigation Characters

Characters used to help navigate the code reader are:

- 1) ">" -- Indicates current selection.
- 2) "Pd" -- Identifies a pending DTC when viewing DTCs.
- 3) "\$" -- Identifies the control module number from which the data is retrieved.

## 3.5 Vehicle Power

The power of the code reader is provided via the vehicle Data Link Connector (DLC). Follow the steps below to turn on the code reader:

- 1) Connect the OBD II cable to the code reader.
- 2) Find DLC on vehicle.

A plastic DLC cover may be found for some vehicles and you need to remove it before plugging the OBD2 cable.

- 3) Plug OBD II cable to the vehicle's DLC.

## 3.6 Product Setup

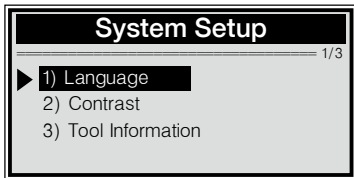
The brake tool allows you to make the following adjustments and settings:

- 1). **Language:** Selects desired language.
- 2). **Contrast:** Adjusts the contrast of the LCD display.
- 3). **Tool Information:** Provides important information about the device.

## USER'S MANUAL

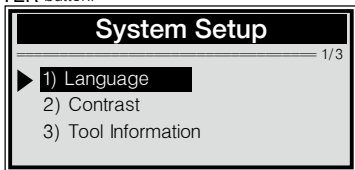
### To enter the setup menu

From home screen,press **EXIT** button to enter **System Setup** menu.  
Follow the instructions to make adjustments and settings as described in the following setup options.

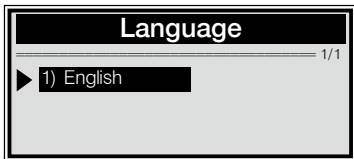


### Language Setup

1). From **System Setup** menu,use **UP/DOWN** button to select **Language**, and press **ENTER** button.

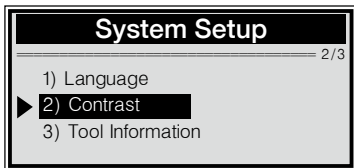


2). Use **UP/DOWN** button to select the desired language and press **ENTER** button to save your selection and return to previous menu.

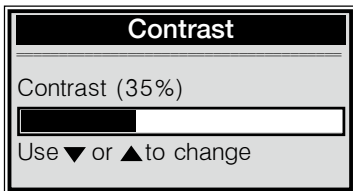


## Contrast Adjustment

1). From **System Setup** menu, use **UP/DOWN** button to select Contrast, and press **ENTER** button.

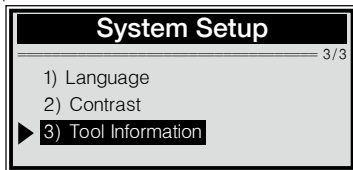


2). From **Contrast** menu, use **UP/DOWN** button to adjust contrast, and press **ENTER** button to save and return or press **EXIT** button to exit without saving.



## Tool Information

1). From **System Setup** menu, use **UP/DOWN** button to select Tool Information, and press **ENTER** button.



2). View tool information on the screen.



3). Press any key to return.

### 3.7 Vehicle Coverage

The Electronic Parking Brake (EPB) Service Tool is specially designed to work with Audi A6/A8 (2004-on), Passat (2005-on), Mercedes E211/E219 (up to 2006), and Mercedes S221 (up to 2007). Volvo S80 (2007-on), V70 (2008-on), XC70 (2008-on), XC60 (2010-on), S60 (2011-on).

## 4. Diagnostics

**The EPB Service Tool is a multifunction solution specially designed to help technicians replace brake pads more safely and efficiently. It is able to read/clear EPB/SBC trouble codes, deactivate/activate SBC/EPB system, change brake fluid/bleed brake system, inspect brake air and set thickness of rear brake calipers after changing brake discs & pads.**

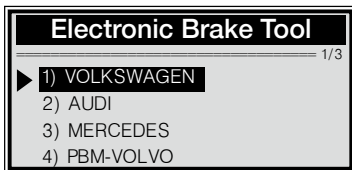
- 1). Turn the ignition off.
- 2). Release the park brake and make sure the car is properly blocked.
- 3). Locate the vehicle's 16-pin Data Link Connector (DLC).
- 4). Plug into the OBDII cable to the vehicle's DLC.
- 5). Turn the ignition on.

### 4.1 Diagnose EPB on Volkswagen

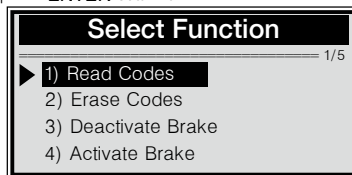
**The EPB Service Tool is able to open/close brake pads, read/clear EPB trouble codes on vehicles that are equipped with EPB system. It can also enter thickness of rear brake calipers after changing brake discs & pads.**

## A. Reading Codes

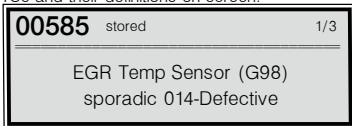
1). Use **UP/DOWN** button to select **VOLKSWAGEN** from **Main Menu** and press **ENTER** button to confirm.



2). Use **UP/DOWN** button to select **Read Codes** from **Select Function** menu and press **ENTER** button to confirm.



3). View DTCs and their definitions on screen.



The sequence of the DTCs, total number of codes detected and type of codes (stored or current) will be observed in the display.

4). If more than one DTC is found, use **UP/DOWN** button, as necessary, until all the codes have been shown up.

If no codes are detected, a "No codes are stored in the module!" message displays on the screen.



## USER'S MANUAL

If the code definition is not found in the built in DTC library, a **"DTC definitions not found! Please refer to User's Manual!"** message comes up prompting you to look up the definition in the vehicle service manual.

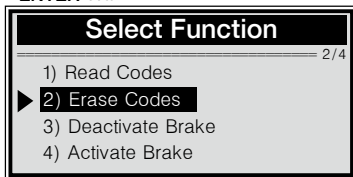
5). Press **EXIT** button to return to previous menu.

### B. Erasing Codes

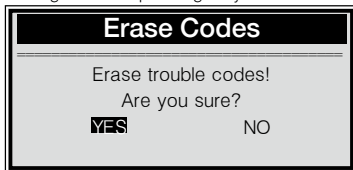
**CAUTION:** Do not erase the codes before the system has been checked completely by a technician.

This function is performed with key on engine off (**KOEO**). Do not start the engine.

1). Use **UP/DOWN** button to select Erase Codes from Select Function Menu and press **ENTER** button.



2). A warning message comes up asking for your confirmation.



If you do not wish to proceed to erase the codes, press **EXIT** button or use **UP/DOWN** button to select **NO** and then press **ENTER** button to exit. A **"Command Canceled!"** message shows up. Press any key or wait a few seconds to return.

3). Press **ENTER** button to erase.

If the codes are cleared successfully, an **"Erase Done!"** message

shows up.

If the codes are not cleared, then an **"Erase Failure. Turn Key on with Engine off!"** message displays.

## C. Deactivate Brake

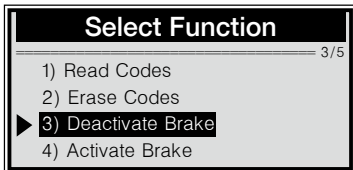
**WARNING:** Deactivate the **EPB** system before carrying out any maintenance/service work on the brakes such as changing of pads, discs and calipers!

Use proper tools to avoid the risk of body injuries of mechanics and technicians and damage to the brake system.

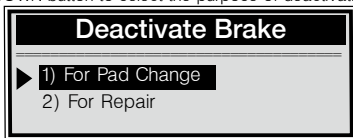
Make sure the vehicle is properly blocked before deactivation of the system

1) To deactivate the EPB functions, use **UP/DOWN** button to select

**Deactivate Brake from Select Function** menu and press **ENTER** button.



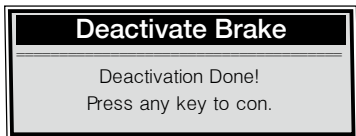
2). Use UP/DOWN button to select the purpose of deactivating the brake.



Note: Please select the purpose of activation properly. **For Pad Change** is used to open the brakes completely for change of worn pads. If you just intend to do repairs on the brakes other than changing the pads, please select **For Repair**. If **For Repair** is selected, the brakes will not open wide enough for pad change.

## USER'S MANUAL

3). Wait a few minutes while the tool is deactivating the brakes. When they are deactivated successfully, a **"Deactivation Done!"** message comes up:



If the tool fails to open the brake pads, a **"Deactivation Failed! Please try again!"** message comes up.

- Verify that the ignition is ON;
- Check if the brake tool's OBD II connector is securely connected to the vehicle's DLC;
- Check that the park brake is released;
- Turn the ignition off and turn it back on 10s later;
- Repeat the process.

If the **"Deactivation Failed!"** message does not go away, then contact your local distributor or the manufacturer's customer service department for assistance.

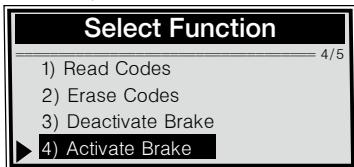
4). Press any key or wait a few seconds to return to previous menu.

### D. Activate Brake

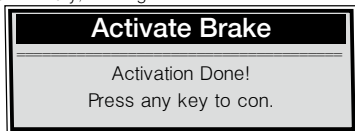
**WARNING:** The EPB system must be activated after finishing the maintenance/service work on the brakes.

Make sure the vehicle is properly blocked before activation of the system.

1). To close the brake pads after finishing the maintenance/service work on the brakes, use **UP/DOWN** button to select **Activate Brake** from **Select Function** menu and press **ENTER** button.



2). Wait a few minutes while the device is activating the brakes. When they are activated successfully, following screen shows:



If the tool fails to open the brake pads, an **"Activation Failed! Please try again!"** message comes up.

- Verify that the ignition is ON;
- Check if the brake tool's OBD II connector is securely connected to the vehicle's DLC;
- Check that the park brake is released;
- Turn the ignition off and turn it back on 10s later;
- Repeat the process.

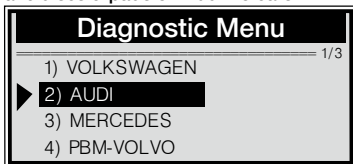
If the **"Activation Failed!"** message does not go away, then contact your local distributor or the manufacturer's customer service department for assistance.

If a **"The selected function is not supported!"** message shows on the display,

- Check that the park brake is released;
- Repeat the process.

## 4.2 Diagnose EPB on Audi

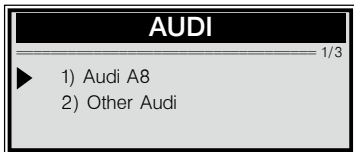
The EPB Service Tool is able to open/close brake pads, read/clear EPB trouble codes on vehicles that are equipped with EPB system. It can also enter thickness of rear brake calipers after changing brake discs & pads on Audi A8 cars.



## USER'S MANUAL

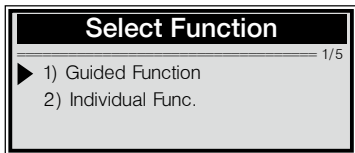
### 4.2.1 Audi A8

Use **UP/DOWN** button to select **EPB-Audi A8** from **AUDI Menu** and press **ENTER** button to confirm.

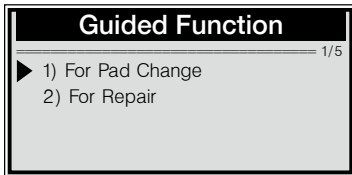


#### 4.2.1.1 Guided Function

1). Use **UP/DOWN** button to select **Guided Function** from **Select Function** menu and press **ENTER** button to confirm.



2). Use **UP/DOWN** button to select **For Pad Change** from **Guided Function** menu and press **ENTER** button to confirm.



press **ENTER** button to continue and **EXIT** to exit.

## Test condition

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- 1) Turn ignition on.
  - 2) Release EPB.
  - 3) Shift to P position
- Y = Continue   N= Exit

press **ENTER** button to continue and EXIT to exit.

## Trouble Codes

1/5

- Trouble: 02596  
Rear brake pads worn.
- 3) Shift to P position
- Y = Continue   N= Exit

## Read Codes

1/5

- Scan fault:  
Requirements:
- 1) Turn ignition on
  - 2) Release EPB.

## Read Codes

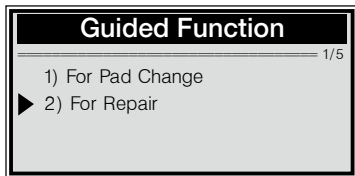
1/5

- 3) Shift to P position

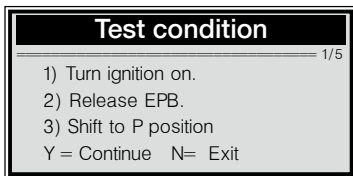
Press Y to Exit

## USER'S MANUAL

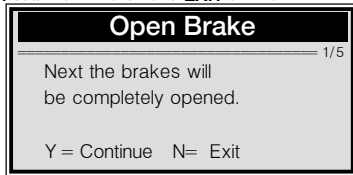
3). Use **UP/DOWN** button to select **For Repair** from **Guided Function** menu and press **ENTER** button to confirm.



press **ENTER** button to continue and **EXIT** to exit.



press **ENTER** button to continue and **EXIT** to exit.

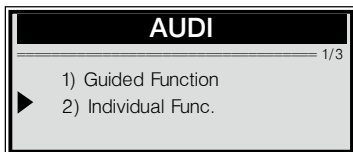


Note: Please select the purpose of activation properly. **For Pad Change** is used to open the brakes completely for change of worn pads. If you just intend to do repairs on the brakes other than changing the pads, please select **For Repair**. If **For Repair** is selected, the brakes will not open wide enough for pad change and it isn't necessary to do the adaptation for Audi A8 either.

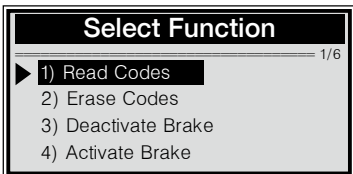
## 4.2.2 Individual Function

### A. Reading Codes

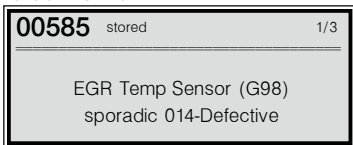
1). Use **UP/DOWN** button to select **Individual Func.** from **Select Menu** and press **ENTER** button to confirm.



2). Use **UP/DOWN** button to select **Read Codes** from **Select Function** menu and press **ENTER** button to confirm.



3). View DTCs and their definitions on screen.



The sequence of the DTCs, total number of codes detected and type of codes (stored or current) will be observed in the display.

4). If more than one DTC is found, use **UP/DOWN** button, as necessary, until all the codes have been shown up.



## USER'S MANUAL

If no codes are detected, a "No codes are stored in the module!" message displays on the screen.

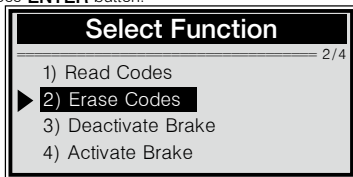
If the code definition is not found in the built in DTC library, a **"DTC definitions not found! Please refer to User's Manual!"** message comes up prompting you to look up the definition in the vehicle service manual.

5). Press **EXIT** button to return to previous menu.

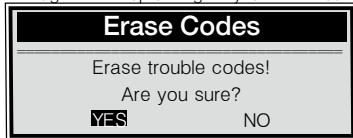
### B. Erasing Codes

**CAUTION:** Do not erase the codes before the system has been checked completely by a technician. This function is performed with key on engine off (KOEO). Do not start the engine.

1). Use **UP/DOWN** button to select **Erase Codes** from **Diagnostics Menu** and press **ENTER** button.



2). A warning message comes up asking for your confirmation.



If you do not wish to proceed to erase the codes, press **EXIT** button or use **UP/DOWN** button to select **NO** and then press **ENTER** button to exit. A **"Command Canceled!"** message shows up. Press any key or wait a few seconds to return.

3). Press **ENTER** button to erase.

If the codes are cleared successfully, an **"Erase Done!"** message shows up.

If the codes are not cleared, then an **"Erase Failure. Turn Key on with Engine off!"** message displays.

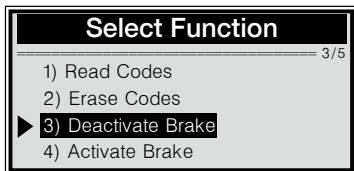
## C. Deactivate Brake

**WARNING:** Deactivate the **EPB** system before carrying out any maintenance/service work on the brakes such as changing of pads, discs and calipers!

Use proper tools to avoid the risk of body injuries of mechanics and technicians and damage to the brake system.

Make sure the vehicle is properly blocked before deactivation of the system

1) To deactivate the EPB functions, use **UP/DOWN** button to select **Deactivate Brake** from **Select Function** menu and press **ENTER** button.



2). Use **UP/DOWN** button to select the purpose of deactivating the brake.



Note: Please select the purpose of activation properly. **For Pad Change** is used to open the brakes completely for change of worn pads. If you just intend to do repairs on the brakes other than changing the pads, please select **For Repair**. If **For Repair** is selected, the brakes will not open wide enough for pad change and it isn't necessary to do the adaptation for Audi A8 either.

3). Wait a few minutes while the tool is deactivating the brakes. When they are deactivated successfully, a **"Deactivation Done!"** message comes up:

## Deactivate Brake

Deactivation Done!  
Press any key to con.

If the tool fails to open the brake pads, a **"Deactivation Failed! Please try again!"** message comes up.

- Verify that the ignition is ON;
- Check if the brake tool's OBD II connector is securely connected to the vehicle's DLC;
- Check that the park brake is released;
- Turn the ignition off and turn it back on 10s later;
- Repeat the process.

If the **"Deactivation Failed!"** message does not go away, then contact your local distributor or the manufacturer's customer service department for assistance.

4). Press any key or wait a few seconds to return to previous menu.

### D. Activate Brake

**WARNING:** The EPB system must be activated after finishing the maintenance/service work on the brakes.

Make sure the vehicle is properly blocked before activation of the system.

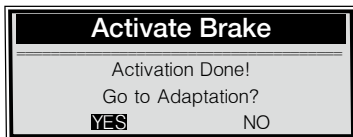
1). To close the brake pads after finishing the maintenance/service work on the brakes, use **UP/DOWN** button to select **Activate Brake** from **Select Function** menu and press **ENTER** button.

## Select Function

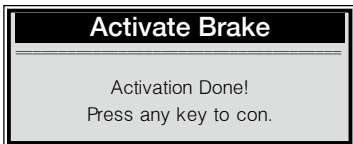
4/5

- 1) Read Codes
- 2) Erase Codes
- 3) Deactivate Brake
- ▶ 4) Activate Brake

2). Wait a few minutes while the device is activating the brakes. When they are activated successfully, following screen shows:



Note: It is necessary to do the adaptation only when brake pads have been changed. If you did not change them, use **UP/DOWN** button to select **NO** to exit.



If the tool fails to open the brake pads, an **"Activation Failed! Please try again!"** message comes up.

- Verify that the ignition is ON;
- Check if the brake tool's OBD II connector is securely connected to the vehicle's DLC;
- Check that the park brake is released;
- Turn the ignition off and turn it back on 10s later;
- Repeat the process.

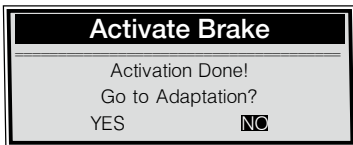
If the **"Activation Failed!"** message does not go away, then contact your local distributor or the manufacturer's customer service department for assistance.

If a **"The selected function is not supported!"** message shows on the display,

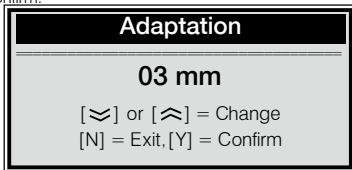
- Check that the park brake is released;
- Repeat the process.

3). If you do wish to go to set the thickness of caliper, press **ENTER** button to continue.

If you do not wish to do the adaptation of caliper at this moment, press **EXIT** button or use **UP/DOWN** button to select **NO** and then press **ENTER** to exit.



4). Use **UP/DOWN** button to enter new pad thickness, and press **ENTER** button to confirm.



If you want to quit the setting, press **EXIT** button and a "**Command Cancelled!**" message comes up.

5). An "**Adaptation Done!**" message comes up on device screen indicating the setting is performed successfully.

If the setting is not carried out successfully, an "**Adaptation Failed!**" message shows. Repeat operations above to try again.

6). Wait a few seconds or press any key to return.

### E. Adaptation

**The Adaptation is used to enter the new calipers thickness of rear brake calipers after changing brake discs & pads on Audi A8 cars.**

1). Turn on ignition.

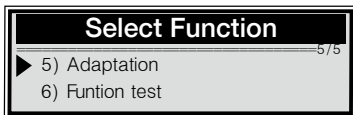
2). Release the park brake.

3). Open the brake completely by selecting **EPB-Audi A8-Deactivate Brake-For Pad Change** as instructed on Page 11-12.

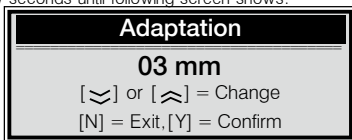
4). Change the pads.

5). Activate the brakes as instructed on Page 12-13.

6). Use **UP/DOWN** button to select **Adaptation** from **Select Function** menu and press **ENTER** button.



7). Wait a few seconds until following screen shows:



8). Use **UP/DOWN** button to enter new pad thickness, and press **ENTER** button to confirm.

If you want to quit the setting, press **EXIT** button and a "Command Cancelled!" message comes up.

9). An "**Adaptation Done!**" message comes up on device screen indicating the setting is performed successfully.

If the setting is not carried out successfully, an "**Adaptation Failed!**" message shows. Repeat steps above to try again.

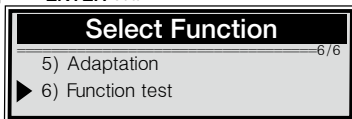
10). Wait a few seconds or press any key to return.

11). Turn the ignition off.

## F. Function Test

**This function is to check the status for above functions after operate.**

1). Use **UP/DOWN** button to select **Function test** from **Select Function** menu and press **ENTER** button.

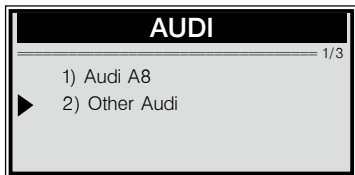


2). press **EXIT** button to return the previous menu.

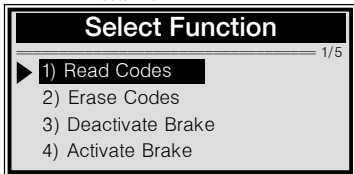
## 4.2.2 Other VAG

### A. Reading Codes

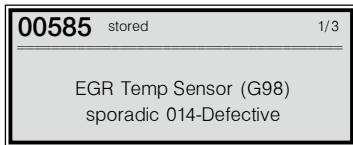
1). Use **UP/DOWN** button to select **EPB-Audi A8** from **AUDI Menu** and press **ENTER** button to confirm.



2). Use **UP/DOWN** button to select **Read Codes** from **Select Function** menu and press **ENTER** button to confirm.



3). View DTCs and their definitions on screen.



The sequence of the DTCs, total number of codes detected and type of codes (stored or current) will be observed in the display.

4). If more than one DTC is found, use **UP/DOWN** button, as necessary, until all the codes have been shown up.

If no codes are detected, a "No codes are stored in the module!" message displays on the screen.

If the code definition is not found in the built in DTC library, a "**DTC definitions not found! Please refer to User's Manual!**" message comes up prompting you to look up the definition in the vehicle service manual.

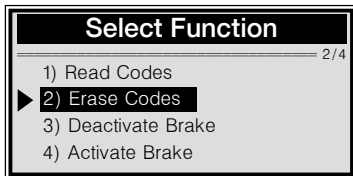
5). Press **EXIT** button to return to previous menu.

## B. Erasing Codes

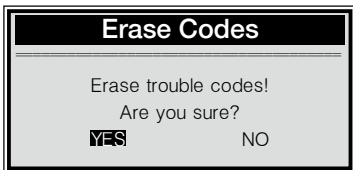
**CAUTION:** Do not erase the codes before the system has been checked completely by a technician.

This function is performed with key on engine off (**KOEO**). Do not start the engine.

1). Use **UP/DOWN** button to select Erase Codes from Diagnostics Menu and press **ENTER** button.



2). A warning message comes up asking for your confirmation.





## USER'S MANUAL

If you do not wish to proceed to erase the codes, press **ENTER** button or use **UP/DOWN** button to select **NO** and then press **ENTER** button to exit. A **"Command Canceled!"** message shows up. Press any key or wait a few seconds to return.

3). Press **ENTER** button to erase.

If the codes are cleared successfully, an **"Erase Done!"** message shows up.

If the codes are not cleared, then an **"Erase Failure. Turn Key on with Engine off!"** message displays.

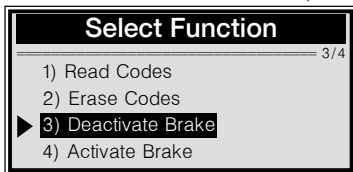
### C. Deactivate Brake

**WARNING:** Deactivate the **EPB** system before carrying out any maintenance/service work on the brakes such as changing of pads, discs and calipers!

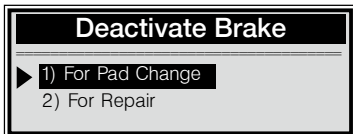
Use proper tools to avoid the risk of body injuries of mechanics and technicians and damage to the brake system.

Make sure the vehicle is properly blocked before deactivation of the system.

1) To deactivate the EPB functions, use **UP/DOWN** button to select **Deactivate Brake** from **Select Function** menu and press **ENTER** button.

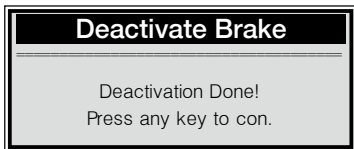


2). Use **UP/DOWN** button to select the purpose of deactivating the brake.



Note: Please select the purpose of activation properly. **For Pad Change** is used to open the brakes completely for change of worn pads. If you just intend to do repairs on the brakes other than changing the pads, please select **For Repair**. If **For Repair** is selected, the brakes will not open wide enough for pad change and it isn't necessary to do the adaptation for Audi A8 either.

3). Wait a few minutes while the tool is deactivating the brakes. When they are deactivated successfully, a **"Deactivation Done!"** message comes up:



If the tool fails to open the brake pads, a **"Deactivation Failed! Please try again!"** message comes up.

- Verify that the ignition is ON;
- Check if the brake tool's OBD II connector is securely connected to the vehicle's DLC;
- Check that the park brake is released;
- Turn the ignition off and turn it back on 10s later;
- Repeat the process.

If the **"Deactivation Failed!"** message does not go away, then contact your local distributor or the manufacturer's customer service department for assistance.

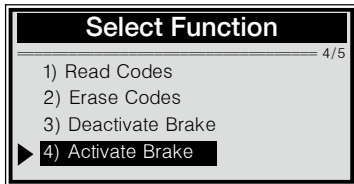
4). Press any key or wait a few seconds to return to previous menu.

### **D. Activate Brake**

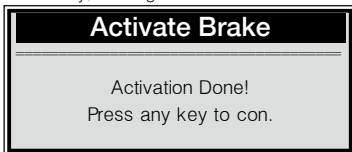
**WARNING:** The EPB system must be activated after finishing the maintenance/service work on the brakes.

Make sure the vehicle is properly blocked before activation of the system.

1). To close the brake pads after finishing the maintenance/service work on the brakes, use **UP/DOWN** button to select **Activate Brake** from **Select Function** menu and press **ENTER** button.



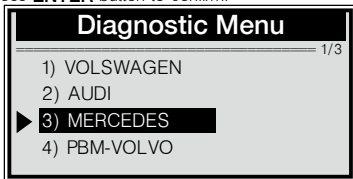
2). Wait a few minutes while the device is activating the brakes. When they are activated successfully, following screen shows:



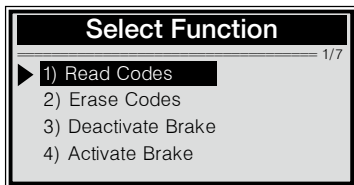
## 4.3 Diagnose Mercedes SBC

The EPB Service Tool is able to deactivate/activate SBC functions, change brake fluid/bleed brake system, inspect brake air, read/clear SBC trouble codes, and retrieve ECU information on Mercedes vehicles that are equipped with SBC system.

1). Use **UP/DOWN** button to select **SBC-Mercedes** from **Diagnostic Menu** and press **ENTER** button to confirm.



2). Wait a few seconds while the device is communicating with the vehicle until following screen shows.



If the brake tool fails to communicate with the vehicle's ECU (Engine Control Unit), a **"LINK ERROR!"** message shows up on the display.

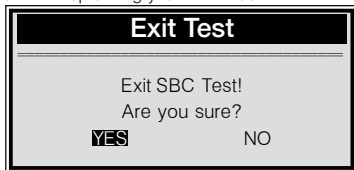
Verify that the ignition is ON;

Check if the brake tool's OBD II connector is securely connected to the vehicle's DLC;

Turn the ignition off and turn it back on 10s later.

If the **"LINK ERROR!"** message does not go away, then there might be problems for the brake tool to communicate with the vehicle. Contact your local distributor or the manufacturer's customer service department for assistance.

3). To exit the SBC test, press **EXIT** button from **Select Function** menu, and a prompt comes up asking your confirmation.

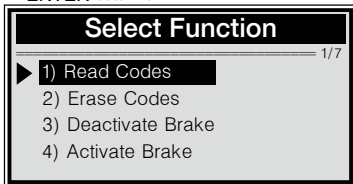


4). Press **ENTER** button to confirm if you do wish to exit; if you do not wish to return, press **EXIT** button or use **UP/DOWN** button to select **NO** and then press **ENTER** button to continue.

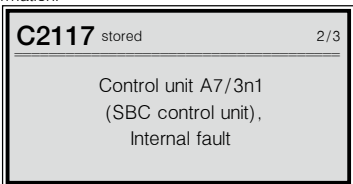
## USER'S MANUAL

### A. Reading Codes

1). Use **UP/DOWN** button to select **Read Codes** from **Select Function** menu and press **ENTER** button to confirm.



2). View DTCs and their definitions on screen. If the code definition covers more than one screen, use **ENTER** button to turn to next page(s) to view additional information.



The sequence of the DTCs, total number of codes detected and type of codes (stored or current) will be observed on the display.

3). When more than one DTC is found, use **UP/DOWN** button, as necessary, until all the codes have been shown up.

If no codes are detected, a **"No codes are stored in the module!"** message displays on the screen.

If the code definition is not found in the built in DTC library, a **"DTC definitions not found! Please refer to vehicle service manual!"** message comes up prompting you to look up the definition in the vehicle service manual.

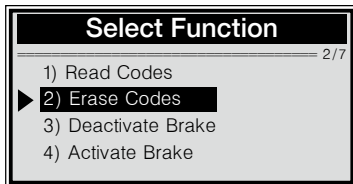
4). Press **EXIT** button to return to previous menu.

## B. Erasing Codes

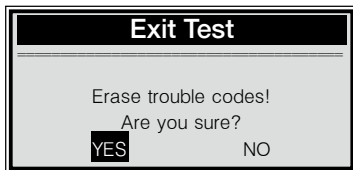
**CAUTION:** Do not erase the codes before the system has been checked completely by a technician.

This function is performed with key on engine off (KOEO). Do not start the engine.

1). Use **UP/DOWN** button to select **Erase Codes** from **Select Menu** and press **ENTER** button.



2). A warning message comes up asking for your confirmation.



If you do not wish to proceed to erase the codes, press **EXIT** button or use **UP/DOWN** button to select **NO** and then press **ENTER** button to exit. A "**Command Canceled!**" message shows up. Press any key or wait a few seconds to return.

3). Press **ENTER** button to erase.

If the codes are cleared successfully, an "**Erase Done!**" message shows up.

If the codes are not cleared, then an "**Erase Failure. Turn Key on with Engine off!**" message displays.

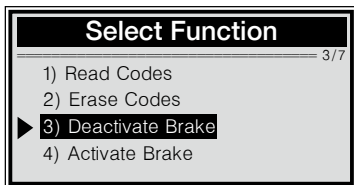
## C. Deactivate Brake

**WARNING:** Deactivate the **SBC** system before carrying out any maintenance/service work on the brakes such as changing of pads, discs and fluids.

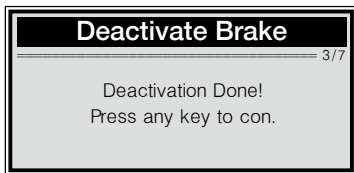
Use proper tools to avoid the risk of body injuries of mechanics and technicians and damage to the brake system.

Make sure the vehicle is properly blocked before deactivation of the system.

1). To open the brake pads, use **UP/DOWN** button to select **Deactivate Brake** from **Select Function** menu and press **ENTER** button.



2). Wait a few minutes while the tool is deactivating. When the brakes are deactivated successfully, following screen shows:



If the tool fails to open the brake pads, a **"Deactivation Failed! Press any key to con."** message shows.

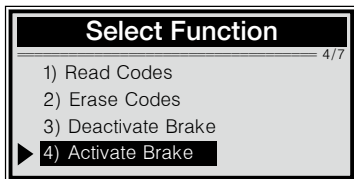
3). Press any key to return to previous menu.

## D. Activate Brake

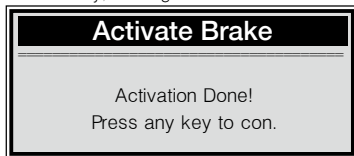
**CAUTION:** The SBC system must be activated after finishing the maintenance/service work on the brakes.

Make sure the vehicle is properly blocked before activation of the system.

1). To close the brake pads after finishing the maintenance/service work on the brakes, use **UP/DOWN** button to select **Activate Brake** from **Select Function** menu and press **ENTER** button.



2). Wait a few minutes while the device is activating the brakes. When they are activated successfully, following screen shows:



If the tool fails to close the brakes, an "Activation Failed! Press any key to con." message shows.

3) Press any key to return to previous menu.

## E. Change Brake Fluid

**WARNING:** Do not operate the brake pedal until you are prompted to!

Make sure the central lock is deactivated!

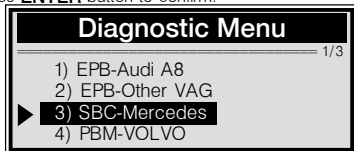
Use extreme caution during the whole bleeding process as the pressure of pump bleed screw will be up to 100 bar!

1). Connect a charger to vehicle battery.

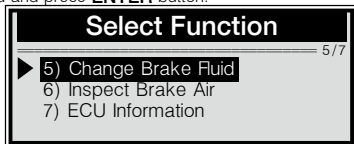


## USER'S MANUAL

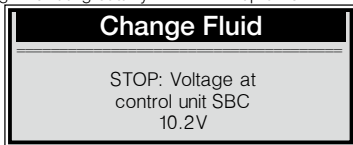
- 2). Prepare at least 2.0 liters of brake fluid and pour the liquid into brake fluid accumulator.
- 3). Connect the fluid accumulator to brake's master cylinder with the accumulator tube.
- 4). Plug the device to vehicle DLC and turn ignition on.
- 5). Use **UP/DOWN** button to select **SBC-Mercedes** from **Diagnostic Menu** and press **ENTER** button to confirm.



- 6). Use **UP/DOWN** button to select **Change Brake Fluid** from **Select Function** menu and press **ENTER** button.



**Important:** To complete the brake fluid change process, make sure vehicle battery is fully charged and is in good condition. The brake tool keeps detecting battery voltage during the whole process. Once the voltage is too low to support the operation, a "STOP: Voltage at control unit SBC xx.xV" message indicating battery low comes up as below:



If the voltage stays at a low level, the device is not able to proceed with the service work. So stop the service by holding EXIT button for at least 1 second, and an **"Operation failed!"** message comes up.

7). Follow onscreen instructions to complete the first phase of operation:

- Connect filling and bleeding unit.
- Set pressure: 2.0-2.5 bar.
- Wait until the pressure has built up.
- Open bleeder screw at rear left brake caliper.
- Hold bleeder hose tight.

8). If you wish to move to the second phase of operation, press **ENTER** button as instructed.

If you do not wish to continue the service, press EXIT button to exit, and an **"Operation failed!"** message comes up.

You can exit the fluid change service at any phase of the operation with **EXIT** button.

9). To complete the second phase of operation, do the following instruction:

- Turn off filling and bleeding equipment.
- Wait until the pressure drops.
- Disconnect filling and bleeding equipment.

10). Press **ENTER** button to move to next phase.

11). To complete the third phase, do the following as instructed:

- Set pressure: 0.5bar.
- Wait until the pressure has built up.

12). Press **ENTER** button to move to phase 4.

13). Following instructions on device screen to finish the fourth phase:

- Reduce pressure at filling and bleeding unit to 0 bar.
- Turn off filling and bleeding equipment.
- Leave filling and bleeding unit connected.
- Wait until the pressure drops.
- If the filling and bleeding unit has a shutoff valve, close it.
- Switch on filling and bleeding unit.

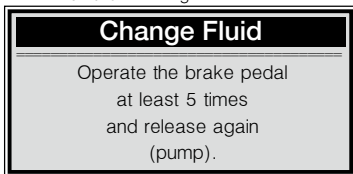
14). Press **ENTER** button to continue with phase 5.

15). Follow onscreen instructions to finish the fifth phase.

- Set pressure: 2.0-2.5 bar.
- If present, open shutoff valve for filling and bleeding unit.

## USER'S MANUAL

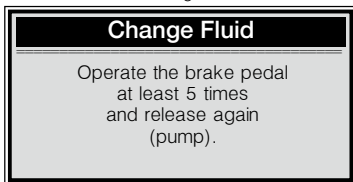
- Wait until the pressure has built up.
  - Hold bleeder hose tight.
  - The pressure at the bleeder screw is greater than 100 bar!
- 16). Press **ENTER** button to continue.
- 17). Follow onscreen instructions to finish the sixth phase.
- Close bleeder screw at rear right brake caliper.
  - Open bleeder screw at rear left brake caliper.
  - Hold bleeder hose tight.
- 18). Press **ENTER** button to continue.
- 19). Follow onscreen instructions to finish the seventh phase.
- Close bleeder screw at rear left brake caliper.
  - Open bleeder screw at front left brake caliper.
  - Operate brake pedal at least 5 times and release again (pump).
  - Stop pumping once the brake fluid flows out free of bubbles.
  - Hold bleeder hose tight.
- 20). Press **ENTER** button to continue.
- 21). Wait a few seconds until following screen shows:



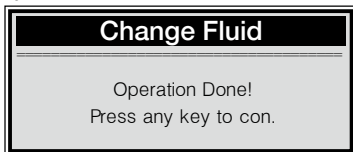
The number "x" on the upper screen indicates how many times you need to operate the brake pedal.

- 22). Operate the brake pedal at least 5 times as instructed.
- 23). Follow onscreen instructions to finish the eighth phase.
- Hold bleeder hose tight.
- 24). Press **ENTER** button to continue.
- 25). Follow onscreen instructions to finish the ninth phase.
- Close bleeder screw at front left brake caliper.
  - Open bleeder screw at front right brake caliper.
  - Operate brake pedal at least 5 times and release again (pump).

- Stop pumping once the brake fluid flows out free of bubbles.
  - Hold bleeder hose tight.
- 26). Press **ENTER** button to continue.
- 27). Wait a few seconds until following screen shows:



- 28). Operate the brake pedal at least 5 times as instructed.
- 29). Follow onscreen instructions to finish the tenth phase.
- Hold bleeder hose tight.
- 30). Press **ENTER** button to continue.
- 31). Follow onscreen instructions to finish the eleventh phase.
- Close bleeder screw at front right brake caliper.
  - All bleeder screws are closed.
  - Brake system venting has been completed.
  - Set filling and bleeding unit pressureless.
  - Leave filling and bleeding unit connected.
- 32). Press **ENTER** button to continue and wait until the "**Operation Done!**" message shows:



If the operation is not carried out successfully, an "**Operation Failed!**" message shows. Repeat the process to try again.

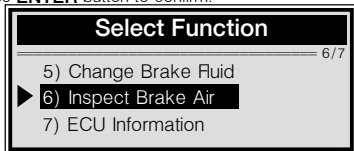
33). Press any key or wait a few seconds to return.

### F. Inspect Brake Air

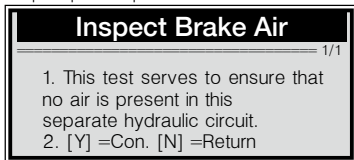
If brake system fails, only the front wheels are braked via a separate hydraulic circuit without brake service assistance. The Inspect Brake Air is to ensure that no air is present in the separate hydraulic circuit.

Important: Do not operate the pedal until you are prompted to do; otherwise the service may not be completed.

1). Use **UP/DOWN** button to select Inspect Brake Air from Select Function menu and press **ENTER** button to confirm.



2). View onscreen prompts and press **ENTER** button to continue.



3). Follow onscreen instructions to finish the first phase of operation:

- Pressure reservoir: check present pressure.
- Actuation takes about 30s.

4). Press **Y** button or gently actuate and then release the brake pedal to continue.

If you do not wish to continue, press **EXIT** button to exit and a "**User Aborted!**" message comes up.

You can exit the air inspection service at any phase of the operation with **N** button.

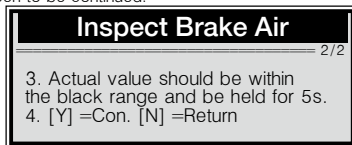
5). Wait a few seconds while the device is communicating with the vehicle.

And follow onscreen instructions to finish the second phase of operation:

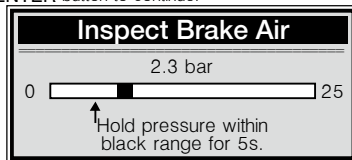
- The brake system pressure reservoir is OK.
  - Check fill status of rear wheel brake circuits.
- 6). Press **ENTER** button or gently actuate and then release the brake pedal as instructed to continue.
- 7). Wait a few seconds while the device is communicating with the vehicle.  
And follow onscreen instructions to finish the third phase of operation:
- Brake system fill status is OK.
  - Check fill status of pedal travel situation.
- 8). Press **ENTER** button or gently actuate and then release the brake pedal as instructed to continue.
- 9). Use **UP/DOWN** button to view onscreen prompts.



Prompt screen to be continued.



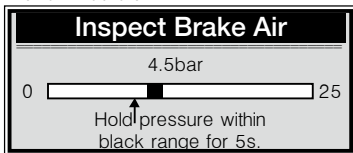
- 10). Press **ENTER** button to continue.



## USER'S MANUAL

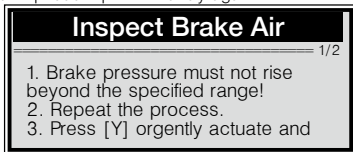
The black block "■" in the screen indicates specified pressure range of current phase.

11). Operate the brake pedal gently to raise the pressure to 4.5-5.5 bar and hold it for 5 seconds as instructed.

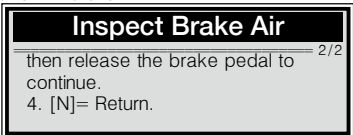


If the pressure can not reach the specified range for a long period, hold **EXIT** button for about 2s to exit, and a **"User Aborted!"** message shows on the display.

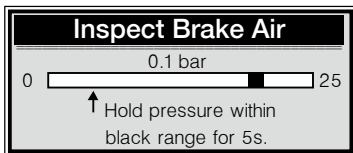
Whenever you operate the pedal too hard and the pressure is raised beyond the specified range of current phase, following screens come up prompting you to repeat the process to try again:



Prompt screen to be continued



12). Continue to operate the pedal gently to increase the pressure to 9.5-10.5 bar and keep it for 5s.



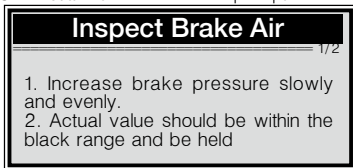
13). Keep operate the pedal to increase the pressure to 19.5-20.5 bar and hold it for 5s.

14) Follow onscreen instructions to finish current phase of operation:

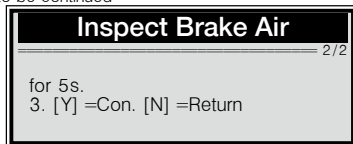
- Release brake pedal.
- A strong brake pedal kickback indicates a fault.
- Did brake pedal pulse weakly?
- If **YES**,press **[ENTER]** or gently actuate and then release the brake pedal to continue.
- If **NO**, press **[EXIT]**.

15). Press **ENTER** button or gently actuate and then release the pedal to continue,and the device starts to communicate with the vehicle.

16). Use **UP/DOWN** button to view onscreen prompts.



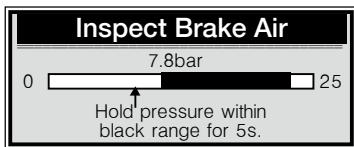
Prompt screen to be continued





## USER'S MANUAL

17). Press **ENTER** button and following screen shows:



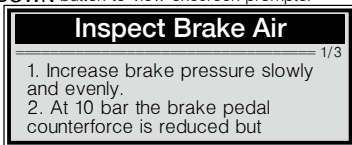
18). Actuate the pedal gently to raise the pressure to 10-20 bar and keep it for 5s.

19). Follow onscreen instructions to complete operation of current phase:

- The fill level of the pedal travel simulator is in order.
- Release brake pedal.
- Check fill status of wheel brake circuit HZ2 (secondary brake circuit).

20). Press **ENTER** button or gently operate the pedal to continue, and the device starts to communicate with the vehicle.

21). Use **UP/DOWN** button to view onscreen prompts.



Prompt screens to be continued



## Inspect Brake Air

3/3

be within the black range and be held for 5s.

5. [Y] =Con. [N] =Return

22). Press **ENTER** button and following screen shows:

## Inspect Brake Air

11.8bar

0

25

Hold pressure within black range for 5s.

23). Actuate the pedal gently to raise the pressure to 20-24 bar and keep it for 5s.

24). Follow onscreen instructions to complete operation of current phase:

- The fill level of wheel brake circuit HZ2 (secondary brake circuit) is in order.

- Release brake pedal.

- Checking fill status of wheel brake circuit HZ1 (primary brake circuit).

25). Press **ENTER** button or gently actuate and then release the pedal to continue, and the device starts to communicate with the vehicle.

26) Use **UP/DOWN** button to view onscreen prompts.

## Inspect Brake Air

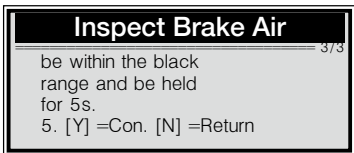
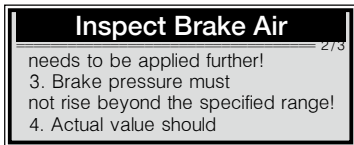
1/3

1. Increase brake pressure slowly and evenly.

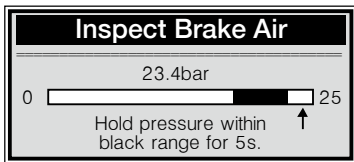
2. At 10 bar the brake pedal counterforce is reduced but

## USER'S MANUAL

Prompt screens to be continued



27). Press **ENTER** button and following screen shows:



28). Actuate the pedal gently to raise the pressure to 20-24 bar and keep it for 5s.

29). Follow onscreen instructions to complete operation of current phase:

- The fill level of wheel brake circuit HZ1 (primary brake circuit) is in order.
- Release brake pedal.
- Brake system fill status is OK.

30). Press **ENTER** button or gently actuate and then release the pedal to complete the air inspection service and following screen shows:

## Inspect Brake Air

1. The test is OK.
2. No air is in brake system.
3. End of test.

If the device fails to inspect brake air, following screens come up:

## Inspect Brake Air

1. Fail to inspect brake system for air.
2. Function of SBC is not assured.

Prompt screen to be continued

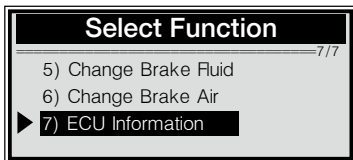
## Inspect Brake Air

3. Please repeat the process.

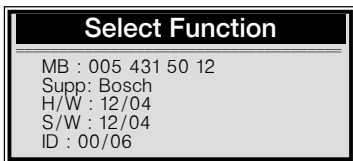
31). Press any key to return.

### G. Retrieve ECU Information

1). To retrieve **ECU** information, use **UP/DOWN** button to select **ECU Information** from **Select Function** menu and press **ENTER** button to confirm.



2). View retrieved information on device screen.



3). Press any key to return.

## 4.4 Diagnose Volvo PBM

The EPB Service Tool is able to deactivate/activate PCM functions, change brake fluid/bleed brake system, inspect brake air, read/clear SBC trouble codes, and retrieve ECU information on Volvo's vehicles that are equipped with PBM system.

Since the Menu of PBM is almost the same as SBC of Mercedes, please kindly review the details of 4.3.



## 5. WARRANTY AND SERVICE

### 5.1 Limited One Year Warranty

We warrant to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

1. The sole responsibility of us under the Warranty is limited to either the repair or, at the option of us, replacement of the Scan Tool at no charge with Proof of Purchase. The sales receipt may be used for this purpose.
2. This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired by anyone other than the Manufacturer's Service Center.
3. We shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the Scan Tool. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

### 5.2 Service Procedures

For technical support, please contact your local store or distributor. If it becomes necessary to return the code reader for repair, contact your local distributor for more information.

